What is claimed is:

1. A magnetic recording head for a helical scan type magnetic recording/reproducing apparatus comprising:

a multi-gap recording head having "n" gaps, wherein:

said gaps are pitched so as to record a pattern of tracks adjacent to one another; and

a gap for recording the last track among "n" gaps of said multi-gap recording head has a wider gap than other gaps.

2. A rotary drum unit for a helical scan type magnetic recording/reproducing apparatus provided with a recording head, a reproducing head, and means for transmitting recording and reproduced signals, wherein:

said recording head is a multi-gap recording head having "n" gaps, and said gaps are pitched so as to record a pattern of tracks adjacent to one another; and

a gap for recording the last track among "n" gaps of said multi-gap recording head has a wider gap than other gaps.

3. The rotary drum unit according to claim 2, wherein:

two multi-gap reproducing heads each having "n" gaps are arranged at an angle of 180° to each other.

4. The rotary drum unit according to claim 2, wherein:

a multi-gap reproducing head having "2n" gaps is arranged at an angle of 180° to said multi-gap recording head.

5. A rotary drum unit capable of recording "n" tracks per rotation, wherein:

two multi-gap reproducing heads each having (n + m) gaps are mounted.

6. A rotary drum unit capable of recording "n" tracks per rotation, wherein:

a multi-gap reproducing head having (2n + m) gaps is mounted.

7. A magnetic recording method for a helical scan type magnetic recording/reproducing apparatus, wherein said apparatus includes a multi-gap recording head having "n" gaps, and said gaps are pitched so as to record a pattern of tracks adjacent to one another; and a gap for recording the last one of said tracks among "n" gaps of multi-gap recording head has a wider recording gap, wherein:

said method comprising the step of:

recording said tracks by determining a tape running speed such that a minimum recorded track width can be ensured when said multi-gap recording head overwrites after one rotation of recording completed by said gap.

8. A magnetic recording/reproducing method in which signals recorded by the magnetic recording method according to claim 7 are reproduced by a multi-gap reproducing head having a head width which is 1/2 of a track width or less, wherein:

two multi-gap reproducing heads each having "n" gaps are arranged at an angle of 180° to each other on a rotary drum as said multi-gap reproducing head; and

said two multi-gap reproducing heads are switched on said rotary drum to transmit reproduced signals therefrom via a rotary transformer having "n" recording channels and "n" reproducing channels.

9. A magnetic recording/reproducing method in which signals recorded by the magnetic recording method according to claim 7 are reproduced by a multi-gap reproducing head having a head width which is 1/2 of a track width or less, wherein:

a multi-gap reproducing head having "2n" gaps is arranged at an angle of 180° to said multi-gap recording head

on a rotary drum as said multi-gap reproducing head; and

said n-channel multi-gap recording head and said multi-gap reproducing head are switched on said rotary drum to transmit reproduced signals from said multi-gap reproducing head via a rotary transformer having "n" recording channels and "n" reproducing channels.

10. A magnetic recording/reproducing method for reproducing signals recorded by the magnetic recording method according to claim 7, wherein:

said signals are reproduced by two multi-gap reproducing heads each having (n + m) gaps.

11. A magnetic recording/reproducing method for reproducing signals recorded by the magnetic recording method according to claim 7, wherein:

said signals are reproduced by a multi-gap reproducing head having (2n + m) gaps.

12. A helical scan type magnetic recording/reproducing apparatus comprising:

a multi-gap recording head having "n" gaps, wherein said gaps are pitched so as to record a pattern of tracks adjacent to one another; and

a gap for recording the last track among said multi-gap recording head has a wider recording gap than other gaps to obtain a recorded pattern of narrow tracks.

13. The magnetic recording/reproducing apparatus according to claim 12, wherein:

two multi-gap reproducing heads each having "n" gaps are arranged at an angle of 180° to each other on a rotary drum.

14. The magnetic recording/reproducing apparatus according to claim 12, wherein:

a multi-gap reproducing head having "2n" gaps is arranged at an angle of 180° to said multi-gap recording head.

15. A magnetic recording/reproducing apparatus capable of recording a pattern of "n" tracks per rotation, wherein: two multi-gap reproducing heads each having (n + m) gaps are mounted.

16. A magnetic recording/reproducing apparatus capable of recording a pattern of "n" tracks per rotation, wherein:

a multi-gap reproducing head having (2n + m) gaps is mounted.